Switch Deployment and Staging

This section provides deployment and staging guidelines for common infrastructure types.

Zero-touch configuration staging

The cloud architecture provides an incredibly powerful sandbox and staging area without the need to ever unbox a single piece of hardware. This is mainly due to the fact that configuration changes and staging lives in the cloud until the device it is destined for checks in. This provides a broad array of new opportunities for streamlining new switch deployments as well as switch refreshes.

Typical staging scenarios

Enterprise deployment

Typical enterprise networks consist of either one large or several distributed locations, with one being designated as the headquarter location.

Hierarchy

It is recommended that each location has its own network container and that each network container is then created under one organization. For more information on dashboard structure, see Introduction to dashboard.

Recommended staging process

1. Create a new network by selecting "Create a network" from the network drop-down

2. Enter in your order number or device serial number(s) as well as a valid license key if prompted

3. Once the network has been created, configure each of your switches as desired. Leverage the clone feature to quickly configure and clone your desired configuration from one to many like switches in the network.


5. Install and connect your switch(es) in their desired locations, provide power and a connection to the Cisco Meraki cloud.

For more information on switch cloning, please see Switch Cloning.

Multi-branch deployment

Branch deployments are typically more simplistic and are often based on a master template, then repeated for each site. Cisco Meraki switches are ideal for this approach as it is very simple to pre-stage one location and then copy the master configuration template to other locations. Additionally things like firmware are managed automatically by the Cisco Meraki cloud.
Hierarchy

It is recommended that each site has its own network container and that each network container is then created under one organization. For more information on dashboard structure, see Introduction to dashboard.

Recommended staging process

1. Create a new network by selecting "Create a network" from the network drop-down and call it "MASTER"

2. Enter in your order number or device serial number(s) as well as a valid license key if prompted

3. Configure all desired network-wide settings that you would like applied to all branch networks by navigating to Configure > Switch settings and Configure > Alerts & administration (e.g. management VLAN, alerts, etc)

4. Create each branch location's network container by following the instructions in step 1 and name them appropriately. Be sure to select "Clone from network" and select the MASTER network you created in step 1

5. Select one switch in the "MASTER" network and name it MASTER SWITCH

6. Configure the ports on the switch selected in the step above by navigating to Configure > Switch ports and performing a search for switch:"MASTER SWITCH"

7. Move all other switches to their respective networks by selecting and using the Move command under Monitor > Switches

8. Navigate to each newly-created branch network, select the switch(es) and choose the Clone option, using the MASTER SWITCH configured in step 6 as the clone source

9. Install and connect your switch(es) in their desired locations, provide power and a connection to the Cisco Meraki cloud.

Campus deployment

Hierarchy

It is recommended that all switches reside within one network container and that tags or naming is used on switch ports. If campus deployment size exceeds 5,000 ports, it is recommended that each building resides within its own network container. For more information on dashboard structure, see Introduction to dashboard.

Recommended staging process

1. Create a new network by selecting "Create a network" from the network drop-down

2. Enter in your order number or device serial number(s) as well as a valid license key if prompted

3. Once the network has been created, configure each of your switches as desired. Leverage the clone feature to quickly configure and clone your desired configuration from one to many like switches in the network.


5. Install and connect your switch(es) in their desired locations, provide power and a connection to the Cisco Meraki cloud.
Deployment examples

An example of a typical branch network deployment

Branch Office

An example of a typical campus network deployment

Large Campus